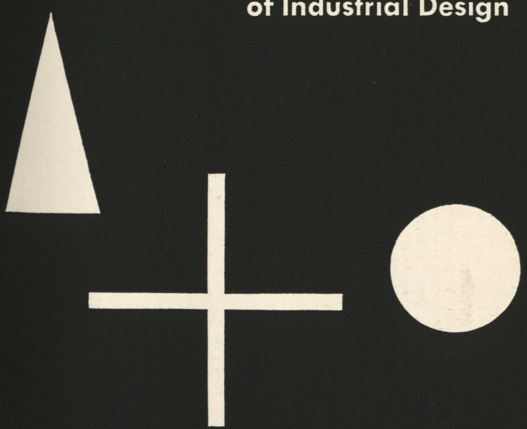
Paul Rand

a design students' guide
to the New York World's Fair
compiled for
P/M magazine . . . by Laboratory School
of Industrial Design



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Curator of Architecture, Museum of Modern Art

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foreword

There has been little to read about the Fair except the interminable publicity and inspired "news" articles. The ordinary intelligent visitor has had almost nothing to guide him but word of mouth information, rarely dependable. He has had no satisfactory way of knowing how to make the most of what time he has had to spend at the Fair.

Anyone seriously interested in fresh ideas in architecture, industrial design, display and similar fields has fared even worse. He certainly cannot find everything out for himself; the Fair is so large that probably neither his money nor his feet will hold out; its confusing general plan will succeed in making him get lost—maddeningly often. Some sort of serious and dependable guide is necessary.

He will be grateful to the Laboratory School of Industrial Design for the pages which follow. Here is a specialized and selective Baedeker of sights not to be missed, chosen and briefly analyzed by people seriously concerned with the aesthetic qualities of design and well informed in the many technical and practical considerations involved.

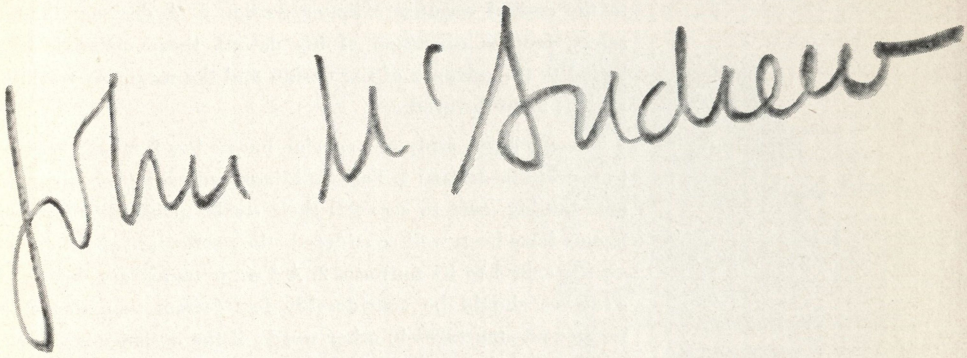
Dozens of the School's students and teachers have gone conscientiously through all of the Fair that was complete a few weeks ago, hunting for good modern design among the pseudo-modern fantasies. The task is unusually difficult for two reasons.

First: There is an infinite variety of "modern" work at the Fair. Much of it is not modern at all but is rather the result of pathetic or perverse style-mannerisms. The Paris 1925 and Chicago 1933 expositions were largely ***modernistic*** *(zig-zags, rays, etc. Compare with your nearest Shoe Shoppe). Part of this Fair is the same. There is also a newer kind of over-streamlined pseudo-modern (see the soft corners and fungoid bulges on the buildings by some of our most celebrated industrial designers). This may be called* ***modernoid.*** *An honest modern design will be shaped by the exigencies of function and materials, and by the formal invention of the designer. It will be free of mannerisms.*

Second: Selecting good designs at an exposition is more difficult than selecting good buildings or good items of industrial design alone (many items on this list are neither). An exposition has its own special qualities. For example, it is not permanent; it must be vivid; a successful exhibit will often be as close to good advertising as it is to architecture or industrial design. One must look at an exposition ***as an exposition.***

Each item on the following lists has been checked by several people for the several basic criteria listed on the pages which follow. There is no way of achieving an impartial list where aesthetic qualities are a major consideration, but the Laboratory School's system is surely an honest and effective approach to it. Our choices will probably not be exactly coincident with the items selected here (mine are not), but with this conscientious guide it will be ***possible*** *for us to make our own choices. If we examine every selection, we may well disagree with the inclusion of one or two; there is, however, little chance that anything of first quality will have been missed.*

Here at last critical standards have been applied, in a simple way, to the analysis of an important, exciting and unnecessarily bewildering contemporary phenomenon.



introduction by the editors

As design instructors, we find the New York World's Fair a stimulating educational experience and one that embryo designers should make the most of. Examples of good creative design are, however, side by side with what we would call thoughtless design; also many of the best things have been sadly underpublicized. It is hard to know where to look and what to look for.

For this reason, we took upon ourselves the task of compiling a guide,—chiefly for the benefit of design students, but also with interested laymen in mind,—to those exhibits which we would give first place on an itinerary of the Fair.

The choices reflect, of course, the standards of the school and its teachers. Probably there will be as many disagreements with these choices as there are different points of view on the subject of design philosophy or exposition psychology.

It is important therefore to indicate how and on what basis the selections were made.

Nothing was accepted for mention until the editorial board (members of the Laboratory's faculty) had taken a total of 68 survey trips through the Fair, and each recommendation was thoroughly reviewed by all members of the board. Many of the school's advanced students took preliminary trips to assist in the mechanics of getting complete coverage. Their reports were used, too, subject, of course, to review by the board.

The criteria directing selections were three basic rules which underlie the Laboratory's (and other design schools') instruction: 1. A design must suit its purpose or *function*. 2. A designer, in planning the execution of his design, must show awareness of current technological facilities and exploit them to the end of creating a better design. 3. A designer should select, for the execution of his design, those materials best suited to the purpose of the design and the means by which it is to be manufactured.

These criteria apply in a special, but no less fundamental way to exposition design: 1. Fair buildings and exhibitions must be entertaining, easy to see—tell their stories painlessly; if these factors have been well considered—the particular exposition design is suited to its purpose. 2. A Fair is temporary—hence its structure should be considerably less formal than that of a permanent structure—in other words, if the designer is an honest designer, his designs must demonstrate and exploit the fact that it is structurally impermanent. The designer must arrive at forms which proclaim this impermanence. If this is done ingeniously and well, then we know that the designer has considered the technological aspects of his problem. 3. In selecting materials, a fair designer must remember that they are being assembled into temporary structures. His materials in order to suit his design, must be serviceable, gay, informal; easy to assemble and quick to dismantle; attractive and understandable to people in a casual mood.

Space limitations have necessitated severe condensation of material and the omission of many good things. We are sure, too, that in spite of the 68 trips, some things deserving mention have been overlooked. For such omissions, we can only ask indulgence and assure the designers and the Fair that no injustice was intended.

Laboratory School of Industrial Design, 116 E. 16 St., N. Y. City

Editor: *Frances T. Schwab.* Editorial Board: *Harold Faye, Anna Franke, William Friedman, Jacques F. Levy, John W. Lincoln, Torben Muller, Hilde Reiss, Theodore Roszak, Lila Ulrich.*

Typography and layout: *Paul Rand.*

Note: The Laboratory School of Industrial Design, established in 1936, was the first school in the United States to devote its entire curriculum to training for the various fields of so called industrial design—namely, product, textile, interior, advertising and display design. Every instructor on the staff must be actively engaged in his profession while teaching at the school.

Key to abbreviations on following pages:

d. designers **l.** location **t.** estimated time for coverage (not to be taken too literally) **r.** recommended

Administration Bridge

d. New York World's Fair, designers. l. From the Administration Building into the Fair (for employees only). t. 5 minutes. r. As a whole.

Steel arches, exposed in constructivist manner, covered with a metal roof slung in between the arches. Railing detail. Continuous indirect lighting trough. Contrast in color between natural wood and steel-blue of the arches. Appropriate lightness.

1. official fair

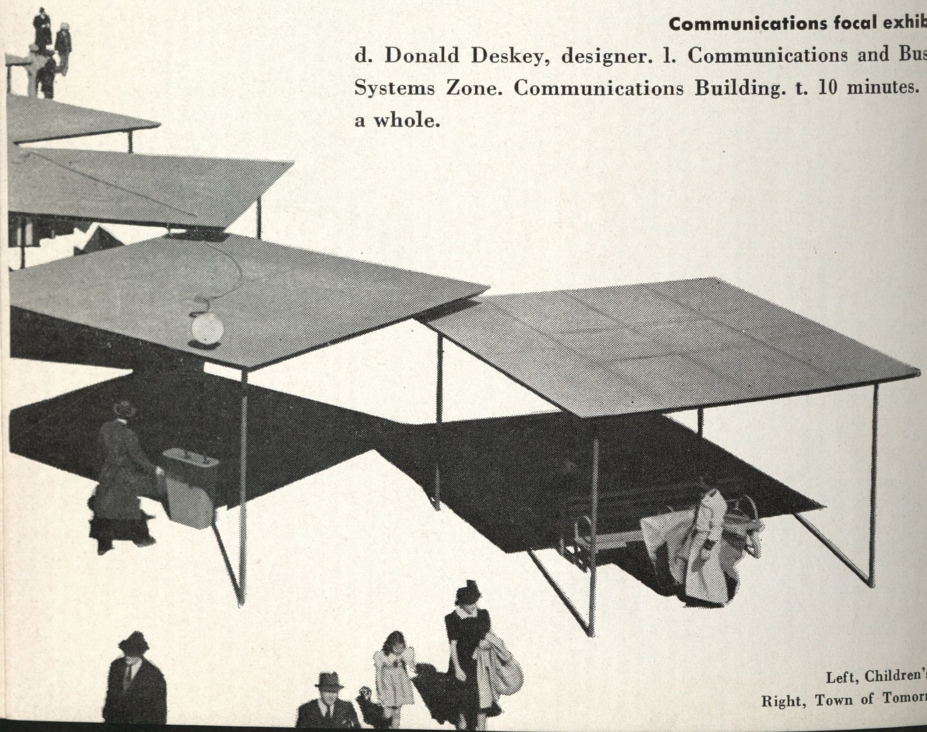
Children's World

d. George Howe, architect. l. Amusement Area. t. 45 minutes. r. As a whole.

General gayety, lightness, carnival atmosphere. *Administration Building and Ticket Booths:*—excellent use on exterior of natural fir plywood with clear varnish finish; built by unit system of construction with lally columns and steel framing; good feeling of openness. *Free Standing Shelters:*—wood roofs built on 2-inch diameter pipes. *Restaurant Building:*—also for its expert use of natural plywood; metal screen cloth applied to studs for ventilation; excellent interior. *Also Note:*—Theme Tower, main ticket booth for escorted tours, Macy's Toyland building, concession booths.

Communications focal exhibit

d. Donald Deskey, designer. l. Communications and Business Systems Zone. Communications Building. t. 10 minutes. r. As a whole.



Left, Children's World
Right, Town of Tomorrow (4)

Clever handling of the whole subject by means of one unified design. Abstractions in various materials incorporate slowly projected stills which tell the story of postal service, printing, telegraph, motion pictures, etc. Huge amusing mural in white on black by Stuart Davis.

1.

Home Furnishings focal exhibit

d. Gilbert Rohde, designer. l. Community Interest Zone. Home Furnishings Building. Next to Town of Tomorrow. t. 15 minutes. r. As a whole.

Excellent general design. Successful handling of materials throughout. Effective use of dioramas and animation. Dramatic contrast achieved with color and lighting effects, for example the dark ceiling with spotlights thrown on the light walls.

Contemporary Arts Building

d. Frederick L. Ackerman, Joshua B. Lowenfish and John V. Van Pelt, associated architects. l. Community Interest Zone. Next to Town of Tomorrow. t. 30 minutes to 1 hour. r. Some pictures and entrance hall.

Use of redwood for exterior, and glass at entrance. Enormous exhibit of over 900 paintings largely devoted to showing sectional tendencies in landscape and social scene painting. Outstanding among the experimental modern work which has an affinity to progressive modern architecture and industrial design are: Gloucester Harbor by Stuart Davis (No. 117); Forms in Black Space by Byron Browne (No. 63); White Form by Carl Robert Holty (No. 235); Musical Composition by Louis Schanker (No. 437).

Food South focal exhibit

d. Russel Wright and Associates, designers. l. Food Zone. Food Building No. 3. Behind Sweden. t. 30 minutes. r. As a whole.

Education with a sense of humor. Brilliant, gay and amusing handling of a popular subject, each exhibit worth study. Inventive use of 3-dimensional biomorphic forms, color, animation. Particularly note the Nutrition Man, Horror Chamber, The Achievement. Also see the exterior mural at entrance of building by Witold Gordon.

Long Island Railroad Station

d. New York World's Fair, designers. l. At entrance to Main Exhibit Area. t. 5 minutes. r. Exterior and interior.

Intelligent use, honestly expressed, of temporary materials such as wood and canvas. Feeling of spaciousness, achieved through judicious use of ribbed wire-glass. Excellent use of color inside and out, which is used to articulate the different structural elements of the building. Good diffused lighting.

Masterpieces of Art

d. Harrison & Fouilhoux, architects. l. Communications and Business Systems Zone. Near Business Systems and Insurance Building. t. 1 hour or longer. r. Building and show.

Clear articulation of concrete forms. Inner court and pool surrounded on three sides by exterior murals by Lionel Feininger. Use of glass at end of court giving fine feeling of openness. Opportunity to see a great collection.

Medicine & Public Health, Science & Education

d. Listed individually. l. Community Interests Zone. At Theme Center. t. 45 minutes. r. Focal exhibits and murals.

Science and Education Focal Exhibit:—George Sakier, designer. Use of experimental exhibit techniques, for example, the projection of images and slogans with synchronized lighting on painted wall murals. Method of presenting the series, Education Begins When Life Begins. Handsome decorative panels on physics phenomena by Eric Mose. Science panels on glass by Allen Saalburg. *Hall of Man Focal Exhibit:*—I. Woodner-Silverman, designer. Demonstration of the human heart beat. Excellent exhibits of growth of the human embryo. Architectonic lighting by Stanley R. McCandless. *Murals:*—by Louis Schanker, Balcomb Greene, Ilya Bolotowsky, and Alexey Brodovitch.

1.

Theme Center

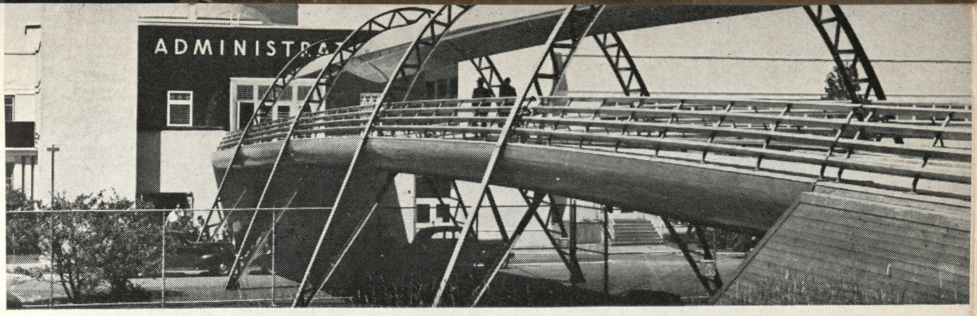
d. Harrison & Fouilhoux, architects. Henry Dreyfuss, designer of interior of Perisphere. l. Between Communications and Business Systems, and Production and Distribution Zones. t. 20 minutes. r. As a whole.

Appropriate selection of two basic abstract design forms to symbolize the design of tomorrow; symbols that are easily reproduced and recognized anywhere. Engineering accomplishment in building and anchoring the largest sphere in the world without apparent effort. Attractive night lighting. Good looking Helicline exit ramps on the Perisphere. *Interior of Perisphere:*—Excellent plan for the handling of crowds by means of slowly revolving platforms.

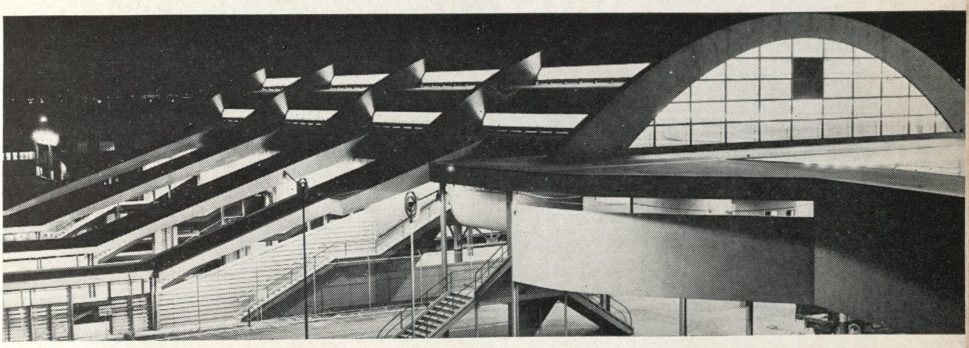
d. Credits given individually. 1. Community Interest Zone. Between Electrified Farm and Contemporary Arts Building. t. 2 to 3 hours. r. Buildings as mentioned.

1.

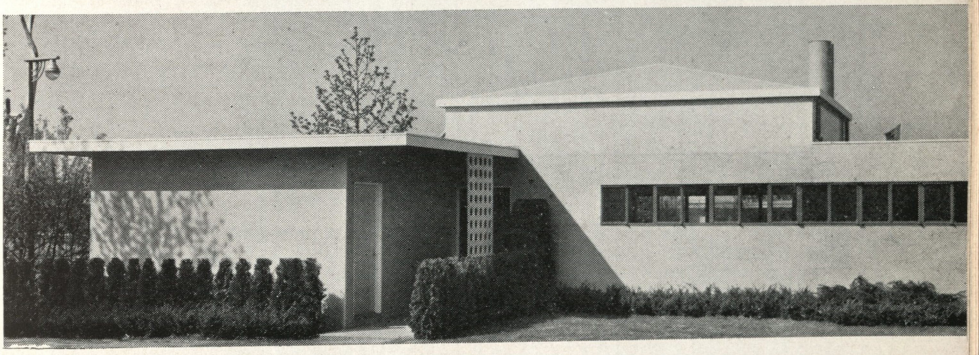
Entrance Gateways and Ticket Booths:—expert and playful handling of problem which is usually passed by without much thought. *Administration Office Building and Rest Rooms:*—Landefeld and Hatch, architects. Successful expression of the lally column construction. Facing tile and stair treads of green tile, a pleasant relief from prevalent white stucco. *House of Plywood (2):*—A. Lawrence Kocher, architect. Furnishings by Modernage. Good plan; intelligent and honest use of wood as construction and finishing material; fine handling of storage elements, especially coat closet at entrance; clearstory windows for natural daylighting and ventilation; plywood trellis at entrance; fine detailing of plywood ceiling, aluminum frames on screen porch; display showing details of wall and roof construction; sliding glass doors between living room and screen porch; drapery fabrics. *House of Vistas (10):*—Vernon Walter Johnson, architect. Furnishings by John Wanamaker, Jan Ruhtenberg, designer. Detail of entrance using natural wood and white-washed brick; sliding fabric partition between hall and multi-use room (which has good furniture, especially couch); well designed unit furniture in living room, dining room, bedrooms; good piano; fine terrace furniture in wood and webbing; curtain fabrics. *House of Glass (4):*—Landefeld and Hatch, architects. Furnishings by Modernage. Good example of "open plan," fine integration of exterior and interior elements; cactus and other plants in indoor conservatory, at stairs and at huge plate glass windows, tending to bring garden into house; exterior concrete stairs broken into two runs; well designed aluminum ceiling tracks; good draperies and curtain fabrics. *Bride's Home (3):*—Landefeld and Hatch, architects. Good use of stock traditional materials (brick and natural wood), both exterior and interior carried out in Japanese and/or Frank Lloyd Wright manner; built-in closets, cabinet recesses; window boxes; window details; terrace treatment and use of serpentine brick wall in garden a la Thomas Jefferson (University of Virginia). *Small House of Brick (5):*—Furnishings by Hortense Reit. Interesting furniture made by blind and crippled, especially in nursery; folding screen and flower shelves in living room.



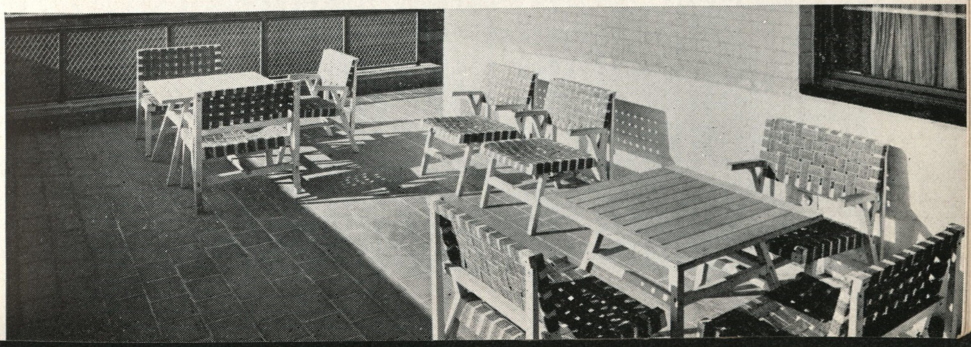
Administration Bridge



Long Island Railroad Station



Above, House No. 2; Below, House No. 10



2. national

Arkansas

d. Morris B. Sanders, architect. l. Court of States. Next to Nevada. t. 10 minutes. r. Interior and exhibits.

Simple graphic exhibits explaining industries and resources of the state. Excellent use of materials, notably in the relief map. Well-designed photographic collages. Interesting diorama.

New York City

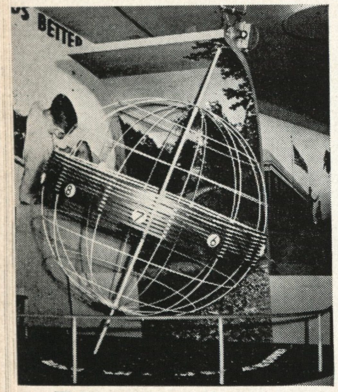
d. Skidmore and Owings, architects and designers of exhibits. l. Just off Theme Center. t. 45 minutes. r. Interior and exhibits.

Excellent, varied and novel methods of presenting clearly and amusingly to the layman the functions and mechanics of the many branches of the municipal government. Effective use of animation, movement, color and sound. Good circulation. Be sure to see Department of Health, Bureau of Purchase, Department of Sanitation, Corporation Counsel, Department of Hospitals, Department of Parks.

North Carolina

d. Xanti Shawinsky and Jenter Displays, designers. l. Court of States. Between Virginia and Puerto Rico. t. 10 minutes. r. Interior and exhibits.

Brilliant exposition of abstract techniques and coherence of design. Attuned to the taste of the aesthetically sophisticated visitor.



W. P. A.

Pennsylvania

d. Walter Gropius and Marcel Breuer, architects. Herbert Bayer, Xanti Shawinsky and Jenter Displays, exhibits. l. Court of States, Next to Missouri. t. 15 minutes. r. Interior and exhibits.

Emphasis on use of materials native to the state, for instance, the wall of coal, the copper meshing separating exhibits, the column details made from stock standard steel rails, the suspension bridge made of steel and glass. Inventive throughout and a dramatic contrast to the exterior which is Independence Hall.

Works Progress Administration

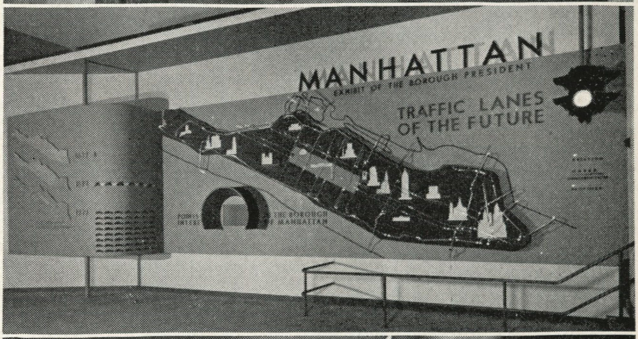
d. Leonard G. Rennie, designer of exhibits. l. Community Interests Zone. Across from American Radiator. t. 30 minutes. r. Interior exhibits and murals.

Excellent, straightforward modern design, expressed in understandable terms, demonstrating "The wealth created by America's unemployed." Spaciousness, good coloring, fine lettering. Interesting variety of animated techniques. Crafts, especially those from Milwaukee. Murals by Eric Mose, Anton Refregier and Philip Guston.

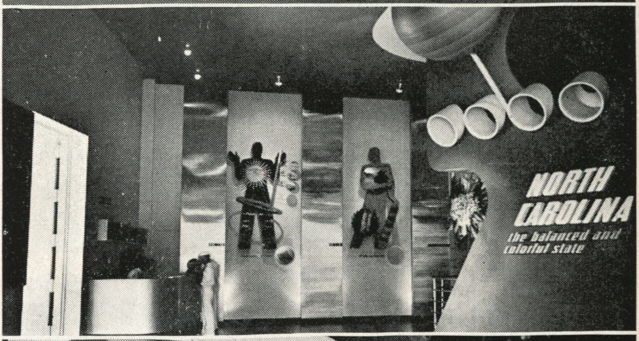
Arkansas

2.

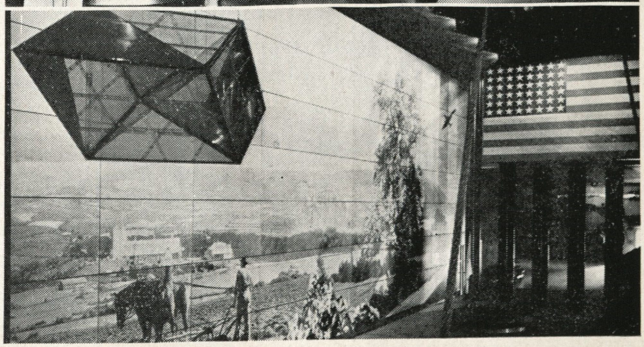
New York City



North Carolina



Pennsylvania



Australia

d. Stephenson & Turner, architects and designers of exhibits. Otto Teegan, consultant architect. l. International Zone. Lagoon of Nations. Adjoining Great Britain. t. 15 minutes. r. Exhibits.

Exhibits of wool industry—glass and metal display cases, with photographs on glass, and samples of wool placed behind etched and sand-blasted glass panels. Relief map in wood. Displays on industry, travel, native animals and birds, for their straightforward presentation. Chairs of different woods (on mezzanine).

Belgium

d. Van de Velde, Stynen and Bourgeois, architects. l. International Zone. On the Lagoon of Nations opposite France and across from the Court of Peace. t. 30 minutes. r. For parts of interior and exhibits.

Exceptionally well-detailed glass-enclosed stairs in steel, with Thermax soffits and sponge rubber floor landings and stair treads. Straightforward, well-executed exhibits in Hall of Industries and Products. Inner court for its harmonius composition of architectural shapes.

Brazil

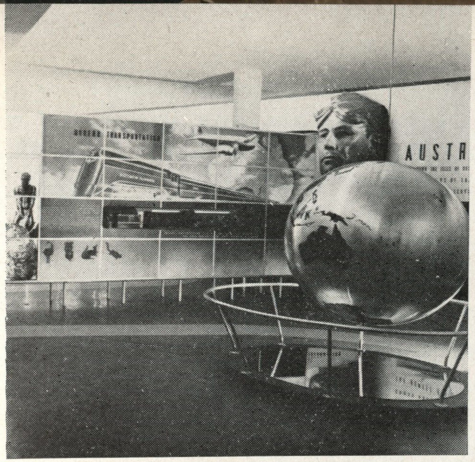
d. Lucio Costa, Oscar Niemeyer Soares, architects; Paul Lester Wiener, interior and exhibits. l. International Zone. Next to France. t. 45 minutes. r. As a whole.

Handsome composition of architectural shapes. Good use of wood for decoration and contrast on exterior. Practical circulation plan for the handling of large crowds. Ground floor, almost entirely open, where raw materials and manufactured products are skillfully displayed, luring the visitor up the ramp to the spacious terrace and further exhibits. Gay, luxurious and open interior. Precious materials, plants, glass and soft colors happily combined. Noteworthy fabric in yellow, black and white on bench upstairs. Excellent craftsmanship in execution of exhibits. Good lettering.

Chile

d. Sanders & Breck and Smith-Miller, associated architects; also designers of the exhibits. l. International Zone. Next to League of Nations. t. 20 minutes. r. As a whole.

Simple, economic planning, achieving interest and restfulness. Agreeable circulation plan, providing for entry from above

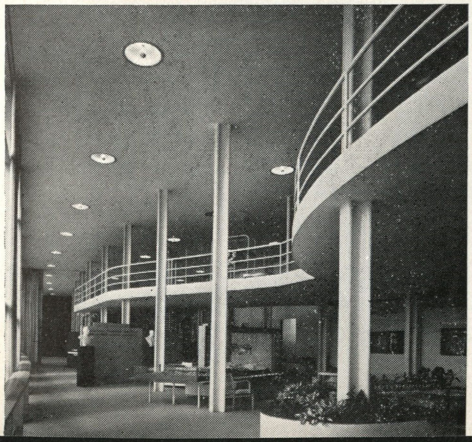


Australia

Chile

Above and below, Brazil

Above, Ecuador; Below, Finland



and downward progress. Feeling of openness achieved through generous terrace and well-detailed, huge windows. Map of Chile on outside of building effectively combining identification, information and decoration.

Czechoslovakia

d. Kamil Roskop, architect, A. Polivka, assistant architect. l. International Zone. Between U.S.S.R. and Japan. t. 30 minutes. r. interior and exhibits.

3.

Well-composed, dignified entrance hall with mosaic panel of Prague. Fine use of materials; good space divisions, achieving openness. Well-designed display cases in metal, glass and wood. Displays of tiles, chemical glassware and textiles. Toy display, and bent-reed furniture on mezzanine.

Ecuador

d. Paul Lester Wiener, interior and exhibits. l. International Zone, Court of Peace. Behind Finland. Next to Federal Building. t. 15 minutes. r. Interior and exhibits.

Pleasant general layout and atmosphere. Excellent displays of agricultural products. Decorative use of plants. Relief over entrance and large, very fine mural inside, both by Camilo Egas.

Finland

d. Alvar Aalto, Aino Marsio-Aalto, architects and designers of interior. l. International Zone. Court of Peace. Presidential Row North. t. 45 minutes. r. Interior and exhibits.

Pavilion as a whole is a brilliant demonstration of variety, interest and beauty achieved in a very limited space. Exploitation of wood, Finland's big native and export product, in an amazing variety of different forms, for example: wall, consisting of cross sections of a tree used as an over-all pattern; alcove ceilings of overlapping veneers; graphic statistics employing wooden spools. Ingenious use of wood propellers, mounted on ceiling in constructivist manner, operating as fans. Fishing nets used as drapes, giving interesting textural effects. Excellent furniture. Suspended film projection booth, which shows films to the diners in the restaurant. Copper sculpture by Alexander Calder.

Great Britain

d. Stanley Hall & Easton & Robertson, architects. l. International Zone. Lagoon of Nations. Next to Italy. t. 45 minutes. r. Some of the interior exhibits.

Individual Public Welfare displays for their clear, straightforward technique of presentation. Mercantile Shipping display for the fine detailed wood railing and refined use of copper and transparent plastic materials. On the ground floor, the steel display in the Hall of Metals. Also full size streamlined racing car, The Thunderbolt, and a scale model of a streamlined motor boat, The Bluebird. Leather display. Sculpture, recumbent figure by H. Moore. Painting by Ben Nicholson in the Fine Arts section.

Ireland

d. Michael Scott, architect and designer of landscaping; L. H. Buchnell, architect for interior; J. E. Coffey, engineering architect. 1. International Zone. Court of Peace. South of Argentina. Next to Canada. t. 15 minutes. r. Exterior and interior.

Successful treatment of windows with fixed canvas awnings. Entrance detail with contour map in outdoor pool of water at entrance. Mural on wall of entrance hall. Circular concrete stairs supported by two lally columns. Whiskey exhibits; tweeds and blankets exhibit.

Japan (small exhibit, not pavilion)

d. Y. Utida, Yasuo Matsui, architects. 1. Court of Peace. Presidential Row South. t. 15 minutes. r. Interior and exhibits.

Central feature of vertical bamboo poles reaching up to a biomorphic construction on the ceiling, suggestive of a Joan Miro painting, which serves as an indirect lighting panel. Wood show-cases on metal tubes, with well-detailed lighting. Fine exhibit of wicker ware; magazine racks, bread trays, candy boxes, etc. Arm chair with bentwood slat seat and back.

Jewish Palestine

d. Arieh El-Hanani, architect; Norvin R. Lindheim, associate architect; Lee Simonson, consultant designer. 1. Community Interests Zone. Across from Temple of Religion. t. 15 minutes. r. Interior and exhibits.

Pleasing color and plan of interior. Good circulation. Clear, well-composed exhibits, making good use of materials, photomurals and color. Use of real fruits in preservative liquid, a successful means of display.

Netherlands

d. J. W. T. von Erp, architect in charge; D. F. Slothouwer, chief architect; George B. Post & Sons, architects. 1. International

Zone. Between Poland and Switzerland. t. 20 minutes. r. Interior and exhibits.

Detail of ceiling used for diffused natural day lighting. Photographic exhibit of architecture. Exhibits of crafts and industrial design; glassware particularly notable.

Sweden

d. Sven Markelius, architect; Pomerance and Breines, associate architects. l. Food Area. Between Continental Baking Co. and Standard Brands. t. 45 minutes. r. As a whole.

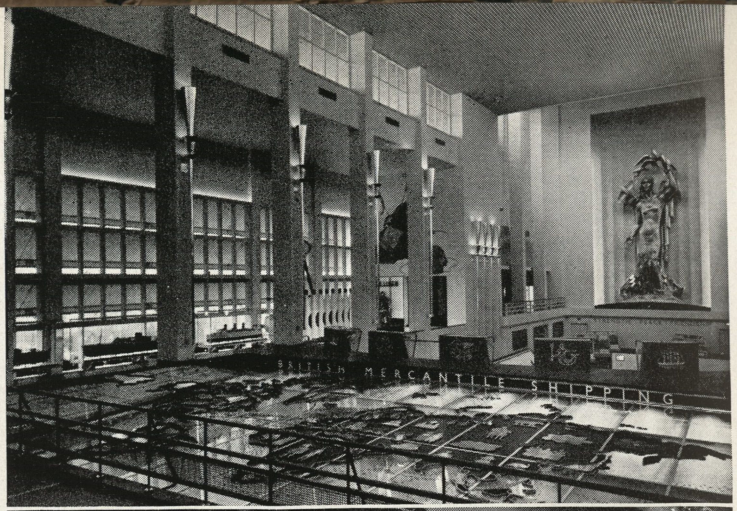
3. Relation of scale of design and materials to human beings. Compare this intelligent handling of the problem of exposition presentation with efforts elsewhere to be imposing. Use of wood (in its natural and undisguised state), a sensible structural and decorative material for Fair architecture. Excellent circulation. Pleasant feeling of openness—of always being in a garden—achieved by open court and the use of glass in covered areas. Names and trademarks machine-engraved in floor tiles effective, unobtrusive advertising. General personal and informal atmosphere. In products displayed, that quality characteristic of Swedish design—the perfect integration of the hand tool with the machine tool so that it is often difficult to tell whether a piece of glass or a table was made by a skillful handcraftsman or an educated machine operator. *Notable items:*— rattan armchairs and lounge chairs in garden court and restaurant; floor lamps and rattan flower stands in reception room; display of nursery furniture, light wood and linoleum; screen of wood slats with ivy; scale model of cooperative apartments; scale model of prefabricated cottage; full size model rooms, remarkable for use of materials, with especially good combination livingroom-diningroom-workroom-kitchen – note sliding dining table, well-designed radio cabinet, desk, compact kitchen; bentwood chairs with leather braiding throughout exhibit; and window curtains in products display. Outstanding cinema.

Switzerland

d. William Lescaze and John R. Weber, architects. Herbert Matter, exhibits. l. International Zone. Court of Peace. North of Presidential Row North. t. 30 minutes. r. As a whole.

Fine use of materials on exterior: wood and transite (pressed asbestos sheets.) Good window detailing. Interesting interior exhibits in constructivist manner. Yellow circular light in ceiling giving feeling of height and sunlight. Successful integration of interior and exterior. Happy feeling of openness.

Sweden



Great Britain

3.

Switzerland

Venezuela

Venezuela

d. Skidmore and Owings, architects; John Moss, associate. Also designers of interior exhibits. l. International Zone. Next to Portugal. Near League of Nations. t. 20 minutes. r. As a whole.

Perfect integration of interior with exterior and garden. Skill in making the most of an exposition's opportunities for structural and decorative experiment. Exterior glass walls, utilizing natural light and open space decoratively. Structural elements, such as H-columns and shield. Handling of the excellent ceiling mural to provide shade and contrast in color and shape. Fine cocoa exhibit. Welded steel canopies over tables outside.

3.

Yugoslavia

d. Volja Branis, architect, Ernest Weissman and Pomerance & Breines, associate architects. l. International Zone. Court of Peace. Presidential Row, South. t. 20 minutes. r. Interior and exhibits.

Excellent handling of space by means of a winding ramp hung from ceiling. Outstanding display techniques, showing ingenious use of materials. Integration of historical displays and samples of old architecture with the rest of the exhibit.

Finland

American Telephone and Telegraph

d. Henry Dreyfuss, designer of interior exhibits. Voorhees, Walker, Foley & Smith, architects. l. Communications and Business Systems Zone. Court of Communications near Theme Center. t. 25 minutes. r. Interior, exhibits and certain exterior features.

4. commercial

Exterior:—pleasant landscaping (150 fir trees). *Interior:*—Spaciousness, dignity and restrained color properly suggestive of an imposing public institution. (The building is three stories high.) Interesting and well-conceived exhibits on the balcony illustrating historical development of telephone communication. Theatrical technique employed in the presentation of the popular exhibits, for example, the girl, visible behind a glass panel two stories up, who invites the visitor to have his hearing tested; the stage effect created by the huge map and raised booths at each end in the "demonstration call" exhibit; the effective backdrop which sets off the Voder. The manner in which the public participates in the exhibits, evoking interest and personal enthusiasm for the wonders of the telephone. Clear plastic instruments (presumably the telephones of tomorrow) used in the demonstration calls.

Anthracite Coal Exhibit

d. Gilbert Rohde, designer. l. In Home Building Center. Between Town of Tomorrow and Bowling Green. t. 15 minutes. r. Whole exhibit.

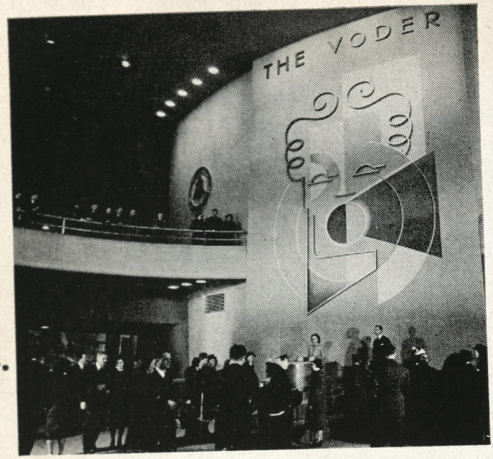
Excellent graphic display techniques, rendering technical subject matter clear and interesting to the layman. Texture achieved by the wall of coal. Well executed map of anthracite region. Appealing display of home equipment utilizing anthracite coal. Convincing general propaganda to illustrate that coal is as good a fuel as oil.

Aviation Building

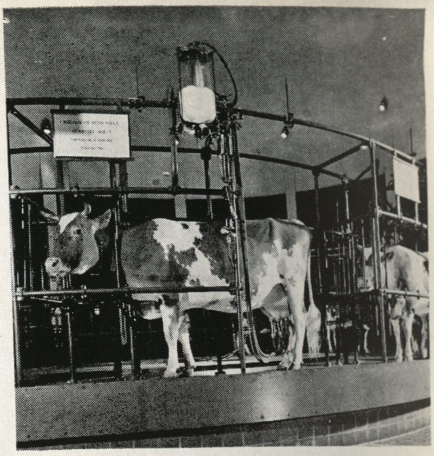
d. William Lescaze, architect; J. Gordon Carr, associate architect. l. Transportation Zone. Across from Ford. Next to Chrysler. t. 20 minutes. r. As a whole.

Clear and perfect expression in form, of the building's structure. Exciting use of materials throughout. Impressive feeling of spaciousness. Interior stairways and platforms at the exhibit of Civil Aeronautics Authority. Well-worked out detail of canvas awnings over walks leading to entrance. Handsome wing entirely devoted to a comfort station.

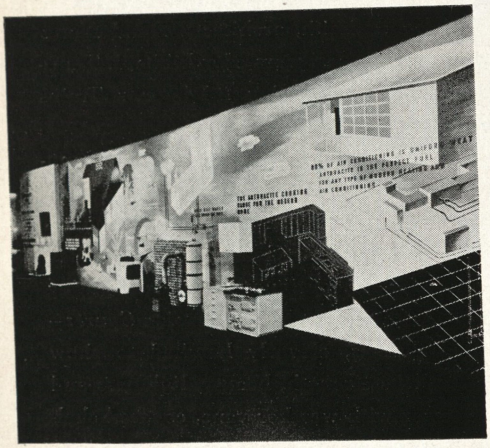
4.



American Telephone & Telegraph

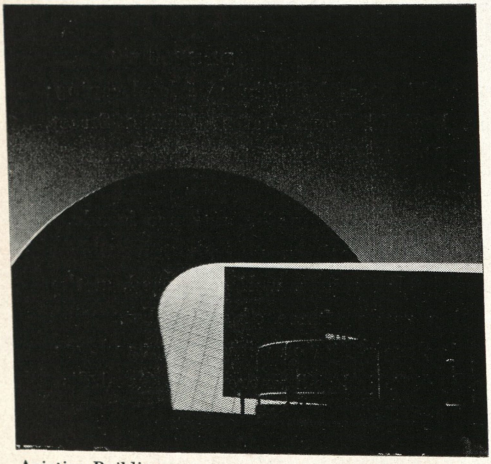


Borden Dairy



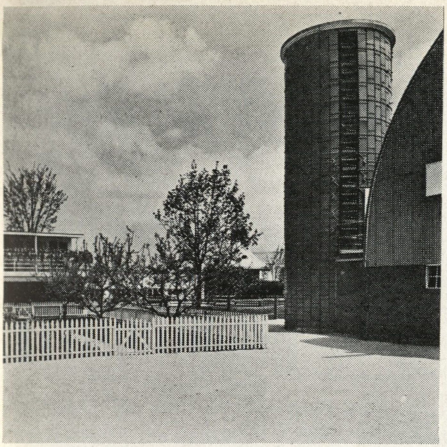
Anthracite Coal

Budd Manufacturing



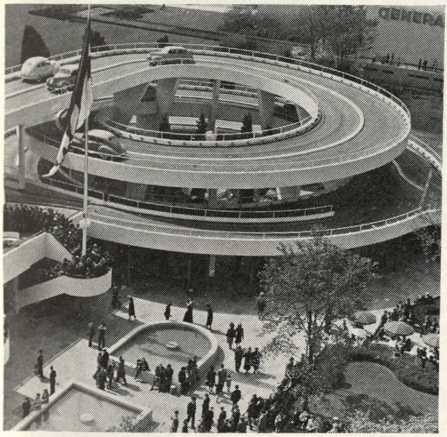
Aviation Building

Distilled Spirits

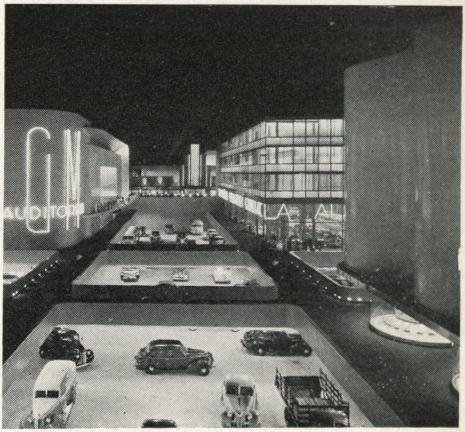


Electrified Farm

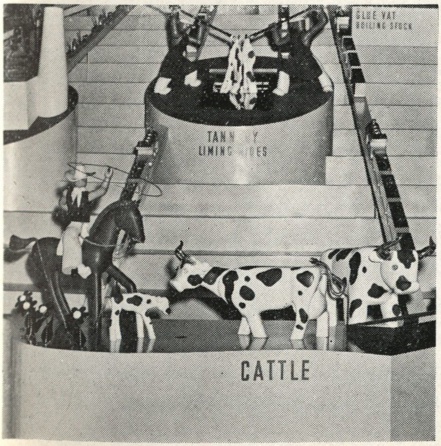
Forward March of America



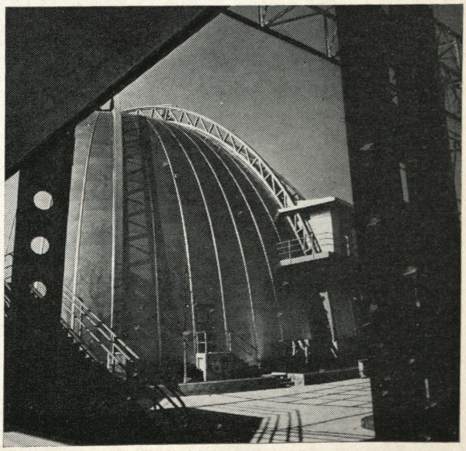
Ford Motor



General Motors



Ford Motor



United States Steel

Eastman Kodak

d. Walter Dorwin Teague, designer. Stowe Myers, associate. Eugene Gerbereux, architect. l. Production and Distribution Zone. Near Theme Center. t. 30 minutes. r. Interior and exhibits.

Projection room where a show of huge handsome stills demonstrates Kodak's technical and aesthetic scope. Good synchronization of sound. General exhibit's free circulation. Glass display cases mounted on thin vertical pipes. Informative demonstration of cameras, lenses, explanation of physics of photography, etcetera. Amusingly executed exterior court with concave-convex mirrors.

Electrified Farm (Electric Utilities)

d. Harrison & Fouilhoux, architects. l. Community Interest Zone. Next to Town of Tomorrow. t. 45 minutes. r. As a whole.

4.

Main Barn:—a modern expression of traditional functions and forms as exemplified in use of structural terra-cotta for walls of lower floor, corrugated sheetmetal for roof. *Silo:*—beautifully handled structural terra-cotta for the walls. *Farm House:*—for its use of painted plywood; the laundry opening on to the porch; the restful porch with its open-air fire-place; beautifully laid-out vegetable garden. *Poultry House:*—for its window detailing. *Insulated Greenhouse:*—for its expert handling of the heating, ventilating and lighting problem. *Community Packing House:*—for its structural terra-cotta walls and good window detailing—all simply and honestly expressed. For its use of corrugated metal on roof and handling of ceiling, which is covered with masonite.

Ford Motor

d. Walter Dorwin Teague, designer, Charles C. Colby & Russell R. Kilburn, associates. Albert Kahn, Inc., architects. l. Transportation Zone. Next to General Motors. t. 45 minutes. r. As a whole.

Clean-cut architectural forms in concrete, particularly the spiral ramp, Road of Tomorrow. Automobiles moving on the ramp, an exciting display touch. Good planning to permit easy circulation and assimilation of exhibits. Cycle of Production, a huge, impressive and very skillfully conceived turntable exhibit, including many amusing animated figures and models, which illustrate the materials and processes involved in the manufacture of automobiles. Note the experimental fabrics made of soy beans. Three-dimensional animated mural. Pleasant semi-enclosed open air garden, restful landscaping.

Glass Industries

Rohm & Haas

Forward March of America (Electric Utilities)

d. Harrison & Fouilhoux, architects. l. Production and Distribution Zone. Plaza of Light. t. 20 minutes. r. Interior and parts of exterior.

Interior:—Street of Yesterday, a well-planned, entertaining full-size reproduction of a gloomy city street in 1892. Street of 1940, strikingly cheerful and pleasant. The pleasant lounge adjacent to the exit. Restful color scheme in natural copper, green and white, water pouring over port-hole windows, copper and glass table, draperies of sheet rubber, pipe-pleated, giving attractive effect of columns of plastic. *Exterior:*—exit, glass-covered arcade with water breaking over the visitor's head and the cascading water fall above—variation on the appropriate theme of dramatizing the source of electric power.

4.

General Motors

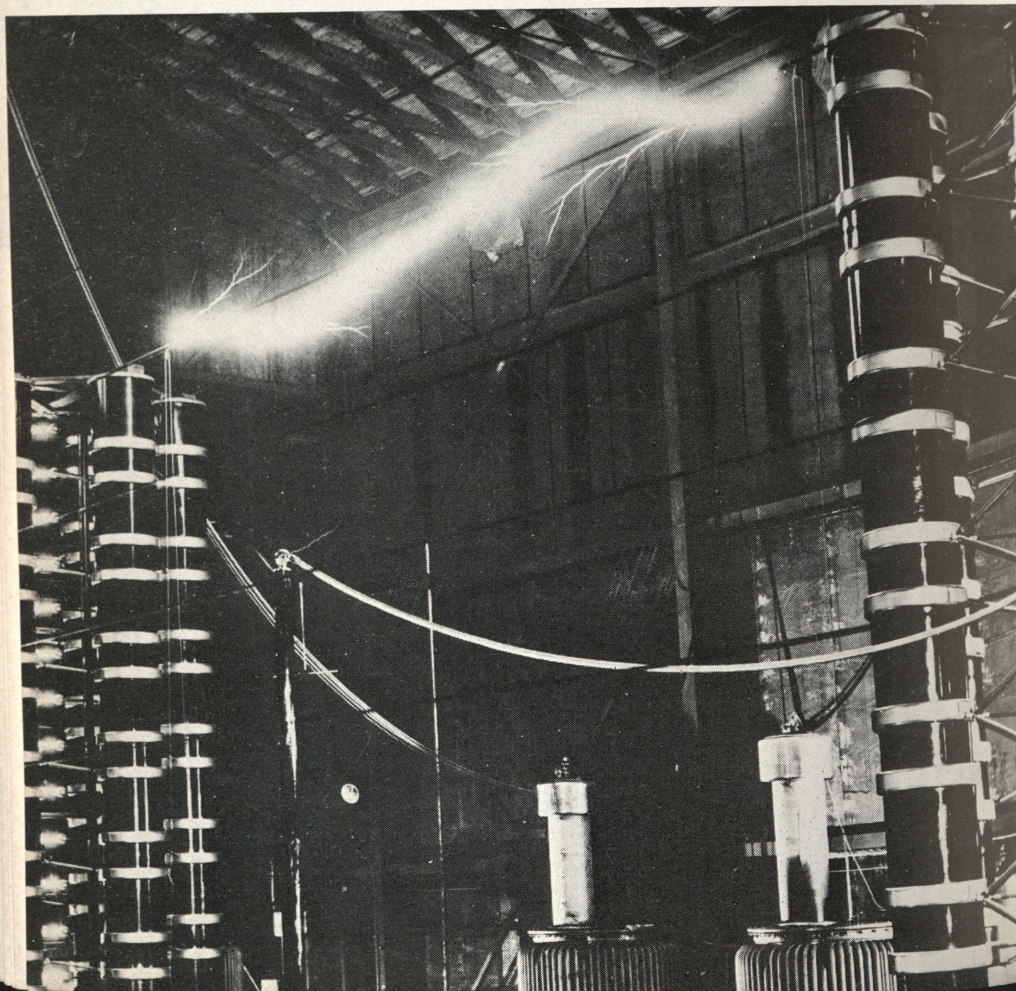
d. Norman Bel Geddes, designer. Albert Kahn, Inc., architects. l. Transportation Zone. Next to Ford. t. 45 minutes. r. Parts of exterior and interior.

Ramps, exterior and interior, leading to Futurama ride. Lobby leading to the ride with its huge highway map of the United States. Bold conception and theatrical execution of Futurama ride. Full size street intersection open to the sky at termination of ride, for its amazing jump from the miniature future to a life-size tomorrow. Covered terraces, with comfortable chairs, overlooking the fair.

Glass Industries

d. Shreve, Lamb & Harmon, architects. Skidmore & Owings, John Moss, Associates, architects of Interior exhibits. Herbert Matter, designer of extrance exhibits. l. Production and Distribution Zone. Next to Metals. t. 45 minutes. r. Interior, exhibits and entrance facade.

4.



Entrance:—3-dimensional forms (some mobile), where glass is used as principal material, combined effectively for display and decorative effects with supplementary media such as color, photography and cable wire. Use of motion interestingly interrelated to the 3-dimensional units. *Interior:*—in main building, series of glass lenses on revolving panel producing a variety of shapes and provocative forms by means of a controlled light source. *Exhibits:* — glass-blowing hall with its spectacular "world's largest" mirror ceiling; also the demonstration itself which is interesting and entertaining. Exhibit of how glass fabrics are made and the fabrics themselves. Small self-operating wall displays, illustrating properties of glass.

Rohm & Haas

d. Gilbert Rohde, designer. l. Hall of Industrial Science. Production and Distribution Zone. t. 15 minutes. r. Whole exhibit.

Dramatic and handsome presentation of properties and uses of Plexiglas and Crystalite. The excellent prize-winning abstract sculpture by Alexander Calder, for its good selection of colored and clear Plexiglas enhanced by exploiting the properties of light transmission.

United States Steel

4. d. Walter Dorwin Teague, designer. George F. Harrell, associate. York & Sawyer, architects. l. Production and Distribution Zone. Plaza of Light. t. 30 minutes. r. Parts of interior, exterior and court.

Integration of building and exhibits to form a unified whole. Use of structural members decoratively, appropriately exploiting steel materials. Handsome balconies and exterior stairways in concrete and steel. Well-composed three-dimensional abstract constructions in court illustrating properties of steel. Smooth circulation plan leading from downstairs up through a balcony exit.

White Owl Cigars

d. Ely Jacques Kahn, architect and designer of interior and exhibits. l. Food Zone. Next to Borden. t. 15 minutes. r. Interior.

Effective emphasis on cleanliness. Ingenious use of cigars, cigar-bands, cigar-boxes as a handsome over-all wall decoration. Interesting mural by Dock Curtis using a combination of fresco and mosaic. Pleasant lounge for relaxation, equipped with a news ticker.

General Electric

5. miscellaneous

American Radiator: entertainingly appropriate columns of terra-cotta flue linings with capital details of coiled copper piping; abstract displays of boilers, heaters, radiators, copper pipes illustrating different heating systems.

Billy Rose's Aquacade: well costumed inventive spectacle.

Consolidated Edison: jets of water playing against blue glass facade (Harrison & Fouilhoux, architects), incorporating a water ballet designed by Alexander Calder.

Denmark: silverware, glass, pottery, stoneware, wooden toys, wicker furniture.

Dominican Republic: the entrance hall, a daring combination of an old Spanish doorway with photomurals and modern displays.

Dream of Venus: surrealist amusement fantasy by Salvator Dali.

Equitable Life Assurance: Garden of Security, a pleasant resting spot, with good tubular metal furniture, shelters and trellis work of delicate steel and natural wood.

Ex-Lax: in Hall of Pharmacy, inventive surrealist construction.

Federal Building: entrance lobbies—heroic architectural forms articulated with pleasant colors.

Fountain Show: every evening at 9:30 in mid-summer, at 9 in spring and fall—a spectacular experiment in synchronized light and color, water and fireworks.

France: display of Lyons industries.

Frank Buck's Jungleland: bamboo and rattan structures. (Hans Oberhammer, designer.)

General Electric: thrilling exhibition of man-made lightning, Steinmetz Hall.

Georgia: display of well-designed manufactured cotton fabrics.

Movies: "The City" in the Science and Education Building. The documentary in the Petroleum Building, introducing a new type of plastic animation figure.

Norway: exterior—fine use of traditional vertical siding; interior—dioramas of the fishing industry.

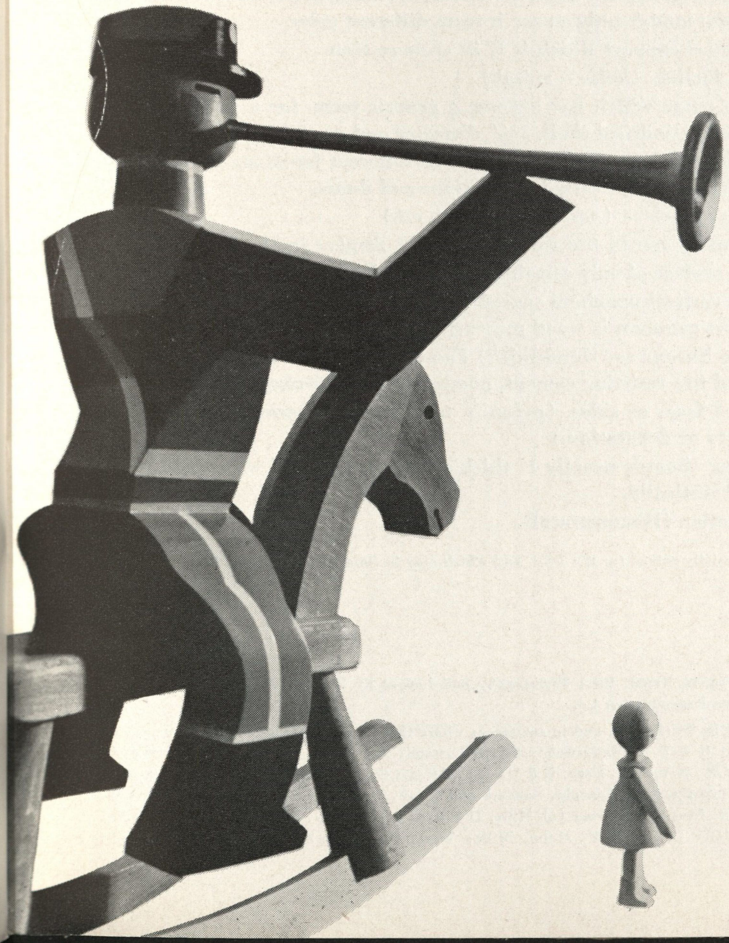
Parachute Jump: good-looking structure in structural steel, set-off by multi-color parachutes.

Poland: handsome bronze tower; curious furniture and model rooms, combining Byzantine, national and modern influences.

Portugal: traditional forms in modern manner. Note trade map in court.

U.S.S.R.: well executed dioramas and models.

World's Fair Incidentals: bus stops—for their simplicity, lightness and unobtrusiveness; lighting standards—for their variety, novelty and well executed design; ticket booths and comfort stations—for their clear-cut use of natural wood; water—for its strategic placing throughout the Fair, as decoration, a means to promote coolness and an effective contribution to the general sense of leisure and spaciousness.



Wooden toys, Denmark